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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/786,709 | 02/24/2004 | Richard F. Dean | 020505 | 3646 |

23696 7590 11/02/2007
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| EXAMINER |
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REGO, DOMINIC E

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| ART UNIT | PAPER NUMBER |
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2618

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| NOTIFICATION DATE | DELIVERY MODE |
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11/02/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/786,709 | DEAN, RICHARD F. | |
| | Examiner | Art Unit | |
| | Dominic E. Rego | 2618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5,9-14,18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwai (*US Patent #5,815,795*).

Regarding claims 1,10 and 19, Iwai teaches method/apparatus for detecting oscillation in a repeater system comprising: embedding a wireless communication device circuit in the repeater; and using the wireless communication device circuit to determine if the repeater system is in oscillation (*Col 1, line 7-15; Col 2, line 9-14; Col 2, line 50-56*).

Regarding claims 2 and 11, Iwai teaches the method/apparatus, wherein using the wireless communication device circuit comprises: establishing a call from the wireless communication device circuit to a base station; and determining oscillation if the call cannot be established (*Col 2, line 57-Col 3, line 21*).

Regarding claims 3,4,12 and 13, Iwai teaches the method/apparatus, wherein

using the wireless communication device circuit comprises: using the wireless communication device circuit to measure signal quality from the base station; and determining oscillation if the signal quality meets a certain criteria (*Col 3, line 14-21; Col 3, line 46-53*).

Regarding claim 5, and 14, Iwai teaches the method, wherein determining oscillation comprises determining oscillation if the signal quality degrades from a level that existed before the repeater was used (*Col 3, line 14-21; Col 3, line 46-53*).

Regarding claims 9 and 18, Iwai teaches the method, further comprising: reducing gain of repeater if the repeater system is in oscillation (*Col 9, line 18-29*).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-9 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwai (*US Patent #5,815,795*) in view of Seki et al. (*US Patent #20040248581*).

Regarding claim 6 and 15, Iwai teaches all the claimed elements in claims 3 and 12, except for the method/apparatus, wherein using the wireless communication device circuit comprises: obtaining signal to noise ratio value to measure the signal quality.

However, in related art, Seki teaches the method/apparatus, wherein using the wireless communication device circuit comprises: obtaining signal to noise ratio value to measure the signal quality (*Paragraph 0006 and claim 3*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of the method/apparatus, wherein using the wireless communication device circuit comprises: obtaining signal to noise ratio value to measure the signal quality, as taught by Seki, in the Iwai device in order to receive a signal with desired quality (*Seki, paragraph 0006*).

Regarding claims 7 and 16, Iwai teaches, the method/apparatus, wherein using the wireless communication device circuit comprises: using the wireless communication device circuit to estimate at least one open loop power control parameter; establishing a communication link from the wireless communication device circuit to a base station using the estimated open loop power control parameter; and determining oscillation if the closed loop power control command is greater than a certain amount (*Col 2, line 50-Col 3, line 21*), except for the method/apparatus, wherein using the wireless communication device circuit comprises: receiving at least one closed loop power control command from the base station.

However, in related art, Seki teaches receiving at least one closed loop power control command from the base station (*Paragraph 0006*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of the method/apparatus, wherein using the wireless communication device circuit comprises: receiving at least one

closed loop power control command from the base station, as taught by Seki, in the Iwai device in order to adjust the transmission power with the target value and avoid the oscillation.

Regarding claims 8 and 17, the combination of Iwai and Seki teach all the claimed elements in claim 7 and 16. In addition, Seki teaches the method/apparatus, wherein using the wireless communication device circuit comprises estimating at least a required transmit power to complete the call, wherein receiving closed loop power control commands comprises receiving at least power adjustment information (*Paragraph 0006*), and Iwai teaches wherein determining oscillation comprises determining oscillation if the power adjustment information is greater than a certain amount (*Col 2, line 50-Col 3, line 21*).

Response to Arguments

5. Applicant's arguments filed 10/05/2006 have been fully considered but they are not persuasive. Regarding claims 1, 10, and 19, Applicant argues that Iwai does not disclose "embedding a wireless communication device circuit in the repeater and using the wireless communication device circuit to determine if the repeater system is in oscillation". The Examiner disagrees. In Col 1, line 7-15, Iwai teaches the present invention relates to an oscillation detecting system for a wireless repeater and, more specifically, to an oscillation detecting apparatus for detecting that a wireless repeater is oscillating, and a wireless repeater having an ability to detect its own oscillation which is same as embedding a wireless communication device circuit in the repeater and using

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the wireless communication device circuit to determine if the repeater system is in oscillation. Regarding claims 2 and 11, Applicant argues that Iwai does not disclose "establishing a call from the wireless communication device circuit to a base station. The Examiner disagrees. In Col 2, line 57-Col 3, line 21 and claim 1, Iwai teaches an oscillation detecting apparatus for detecting an oscillation of a wireless repeater intervening between a base station and a mobile station brought in communication with each other through a time division multiple access system, said wireless repeater being operated to produce an input signal (establishing a call) based on a radio wave transmitted from one of said base station and said mobile station, and amplify said input signal to produce an output signal to either base station or mobile station.

Dependent claims 3-9 and 12-18, see claim rejection for more details.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

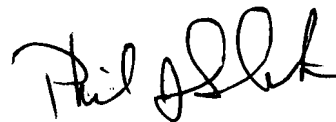
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic E. Rego whose telephone number is 571-272-8132. The examiner can normally be reached on Monday-Friday, 8:30 am-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dominic E. Rego
Tele 571-272-8132



PHILIP J. SOBUTKA
PATENT EXAMINER

10/26/2